

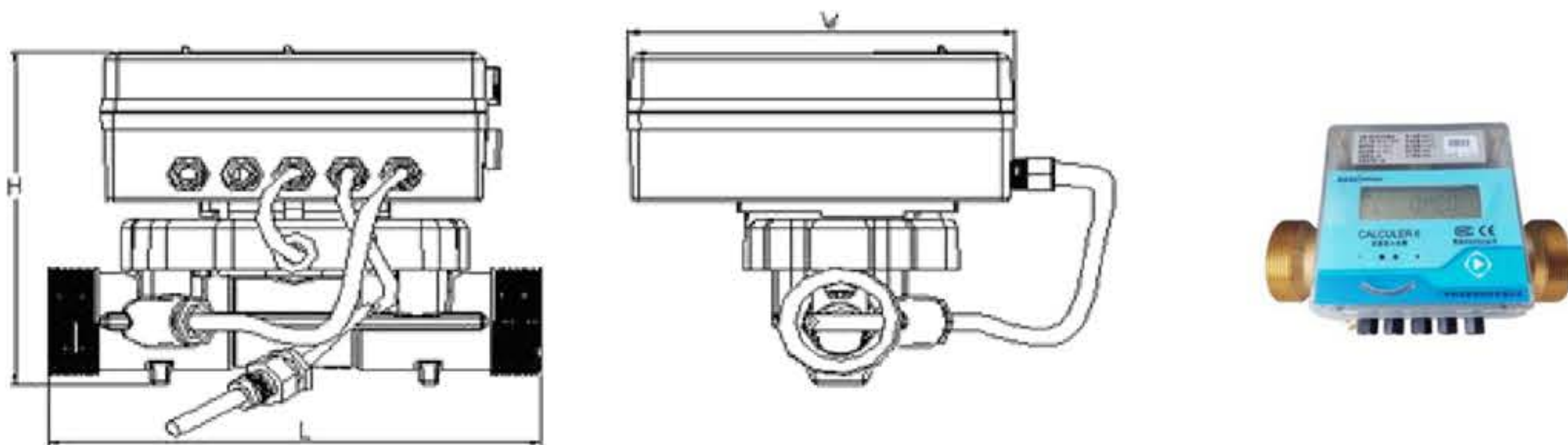


**Product Specification**

# 220 Series Ultrasonic BTU Meter

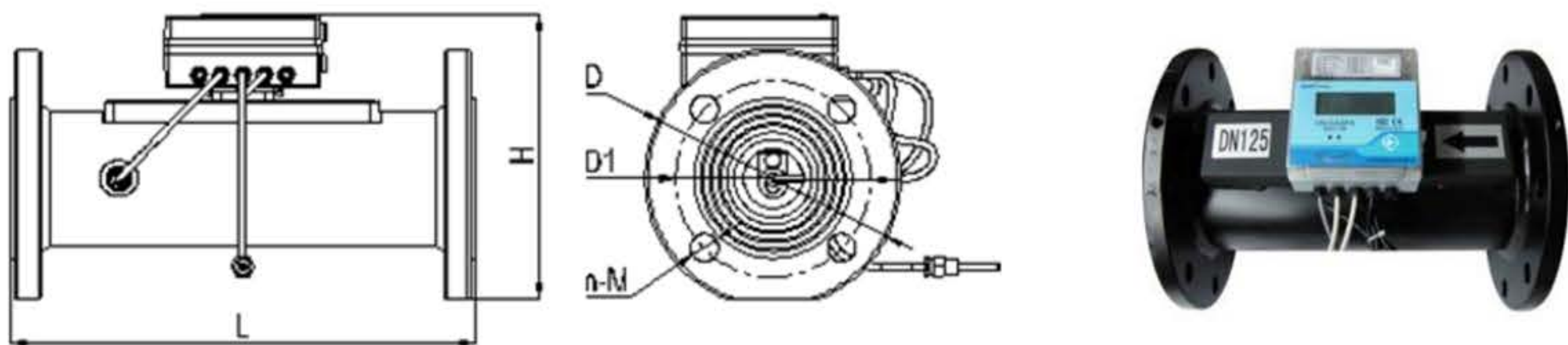


**TYPE SELECTION DN15-DN40**



Dimensions					Flow-rate			Weight
in (mm)					GPM (m³/h)			LB (kg)
DN	L	D	H	W	Q <sub>max</sub>	Q <sub>p</sub>	Q <sub>min</sub>	
0.6 (15)	4.3 (110)	G3/4B	3.8 (96)	4 (108)	13 (3)	6.6 (1.5)	0.066(0.015)/ 0.13(0.03)	3.1(1.4)
0.8 (20)	5.1 (130)	G1B	4 (101)	4 (108)	22 (5)	11 (2.5)	0.11(0.025)/ 0.22(0.05)	3.1(1.4)
1 (25)	6.3 (160)	G1 1/4B	4.2 (106)	4 (108)	31 (7)	15 (3.5)	0.15(0.035)/ 0.31(0.07)	4.1(1.8)
1.3 (32)	7.1 (180)	G1 1/2B	4.4 (113)	4 (108)	53 (12)	26 (6)	0.26(0.06)/ 0.53(0.12)	5.2(2.3)
1.6 (40)	7.9 (200)	G2B	4.8 (121)	4 (108)	88 (20)	44 (10)	0.44(0.01)/ 0.88(0.2)	6.6(3.0)

**TYPE SELECTION DN50-DN200**



Dimensions							Flow-rate			Weight
in (mm)							GPM (m³/h)			LB(kg)
DN	L	D	H	D1	n	M	Q <sub>max</sub>	Q <sub>p</sub>	Q <sub>min</sub>	
2 (50)	11.8 (300)	6.5 (165)	6.9 (175)	4.9 (125)	4	0.7 (18)	132 (30)	66 (15)	0.66 (0.15)/ 1.32(0.3)	33.1(15)
2.6 (65)	11.8 (300)	7.3 (185)	7.7 (196)	5.7 (145)	4	0.7 (18)	220 (50)	110 (25)	0.11 (0.25)/ 2.2(0.5)	33.1(15)
3.1 (80)	13.8 (350)	7.9 (200)	8.5 (216)	6.3 (160)	8	0.7 (18)	352 (80)	176 (40)	1.76 (0.40)/ 3.52(0.8)	41.9(19)
3.9 (100)	13.8 (350)	8.7 (220)	9.2 (233)	7.1 (180)	8	0.7 (18)	528 (120)	264 (60)	2.64 (0.60)/ 5.28(1.2)	46.3(21)
4.9 (125)	13.8 (350)	9.8 (250)	10 (264)	8.3 (210)	8	0.7 (18)	881 (200)	440 (100)	4.40 (1.00)/ 8.81(2)	79.4(36)
5.9 (150)	11.8 (300)	11.2(285)	11 (291)	9.4 (240)	8	0.9 (22)	1321 (300)	660 (150)	6.60 (1.50)/ 13.21(3)	88.2(40)
7.9 (200)	13.8 (350)	13.4(340)	14 (347)	12 (295)	12	0.9 (22)	2202 (500)	1101 (250)	11.01 (2.50)/ 22.02(5)	172(78)

## OVERVIEW

The Series 220 UHM is a highly accurate and stable BTU meter. It utilizes ultrasonic technology to measure household heating and cooling energy consumption. This series UHM is a combined meter, which suit for long distance installation. The default cable length between calculator and flow sensor is 5 meters. The 8-digit LED display makes reading the measured value simple and easy. The lack of moving parts makes the series UHM a low maintenance unit. These features make it great for installation on chillers, and boilers.

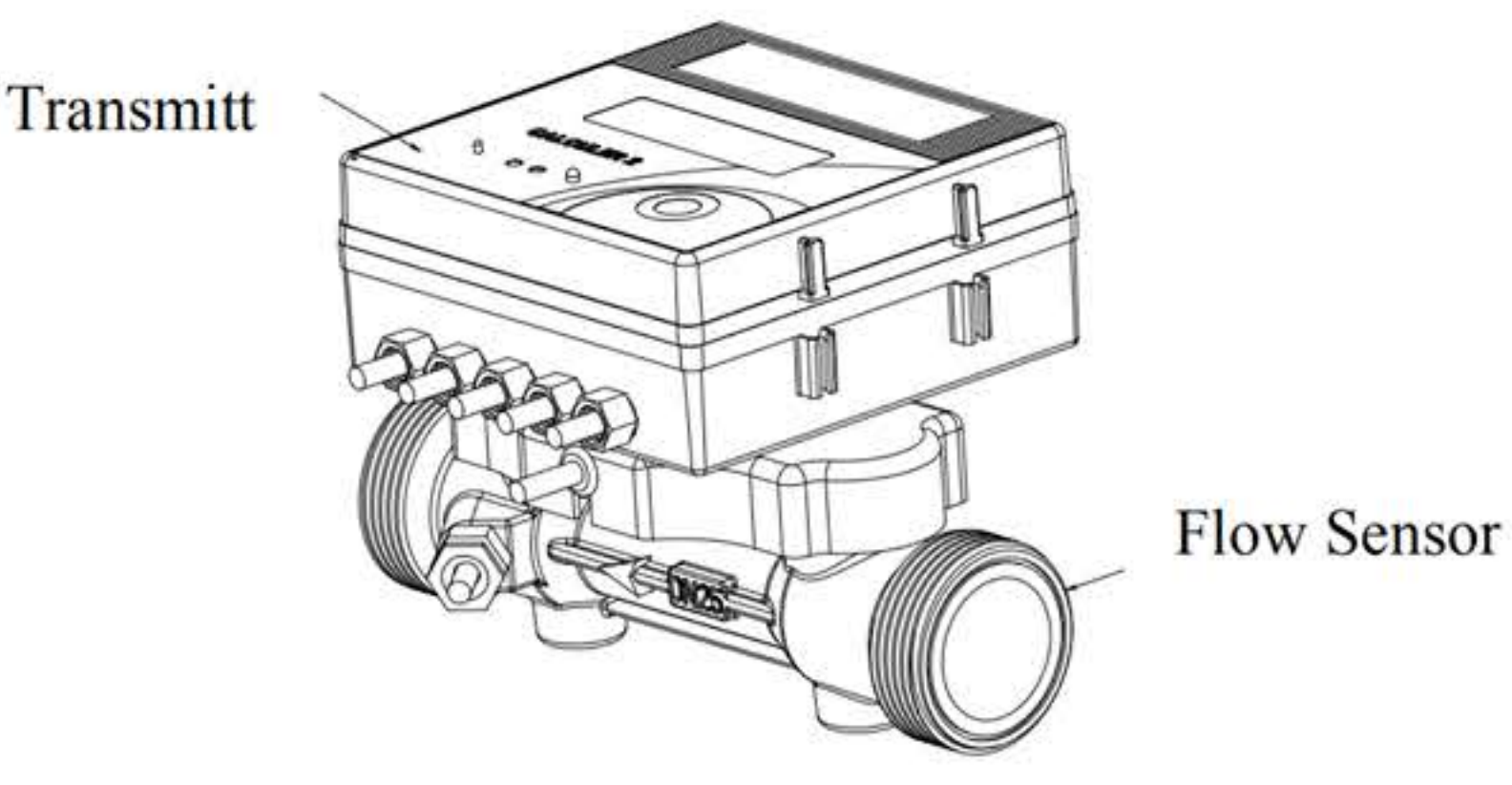
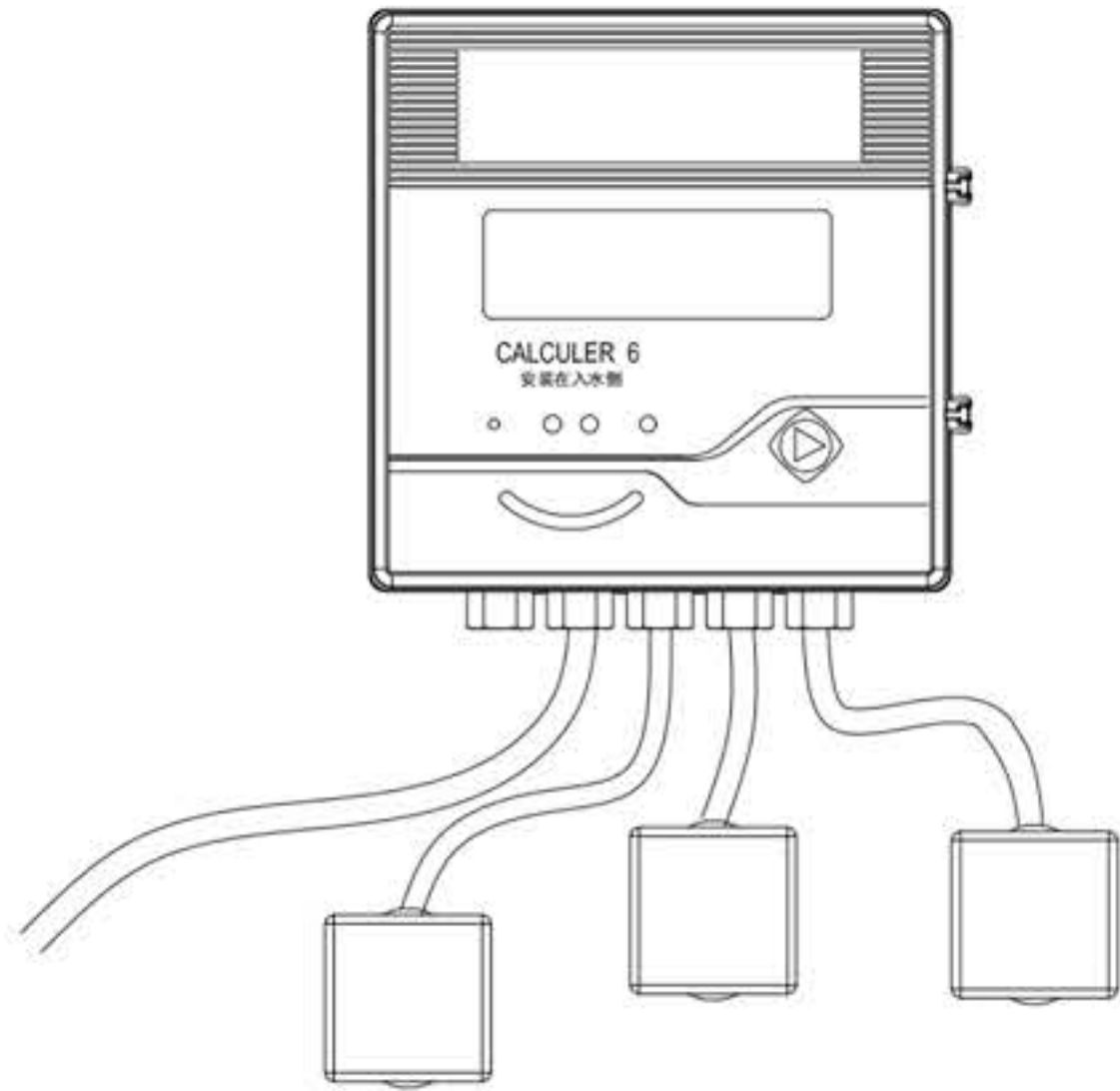
## FEATURES

- Works with both heating and cooling systems
- High accuracy  
The high quality ultrasonic transducer and advanced electronic measurement technology work together to ensure the meter's high accuracy and stability
- No moving parts  
This decreases the maintenance cost and ensures that the meter is resistant to dirty water
- PT1000 platinum resistance
- Low starting flow-rate  
The U-shaped acoustic path widens the dynamic flow-rate measurement range and increases the accuracy of low and high end measurements where other, more narrow ranged, devices are inaccurate
- Horizontal or vertical installation
- RS485 and M-bus output ports can be used for automated meter reading
- Automatic diagnostic function.  
An error code will be displayed on the screen to indicate the problem
- Ability to install an optional 3.6 V battery that can last up to 6 years

## SPECIFICATIONS

Nominal diameter (DN)	15~200mm		
Service	Clean Water		
Storing/Ambient temperature	+5~+55℃		
Ambient humidity	<93%		
Environmental class	EN1434 / CJ128 A Class		
Accuracy class	EN1434 / CJ128 2 Class		
Enclosure protection	IP65		
Pressure loss	<25kPa/qp		
Maximum admissible working pressure	1.6MPa		
Temperature difference threshold value	0.3K		
Temperature range	2~95℃		
Temperature difference range	2~85K		
Temperature resolution	0.01℃		
Rated voltage	3.6vDC (Battery working life is more than 6 years)		
Installation	Horizontal or vertical installing is available		
Network interface	M-BUS	RS485	RS485
Communication Protocol	EN1434, BASIC	MODBUS RTU	BACNET MS/TP
Baud rate	2400bps	9600bps	38400bps
Agency Approvals	CE		

**Product Component**

Flow Sensor/ Transmitter	Calculator
	
<p><b>Temperature Sensor</b></p>	
